ATTACHMENT A

Remarks

In the *Claim Rejections - 35 USC § 112* section of the outstanding Detailed Action, independent claims 65, 80 and 81 were failing to disclose the subject matter of "two TV cameras being pointed substantially in a same direction away from a display". As such is clearly shown in the drawings (see figures 4-6, 14, 16 and 18-19), it is evident that this rejection must be based on something other than the simple disclosure requirement of § 112 which is satisfied by these figures and by common knowledge in the art (as discussed previously).

Judging from the examiner's comments in the *Response To Arguments* section provided later, it is believed that this rejection is more properly grounded in the actual mechanics/equations of "photogrammetry", where stereo images (from two cameras pointed in a same direction) are used to determine three dimensional location. As stated previously, the added language was being used to emphasize this feature of the invention, and to distinguish it from the cited prior art which did not use such a technique. Thus, if this § 112 rejection is directed to the lack of a detailed disclosure of the mechanics of "photogrammetry" (and thus somehow that "mounting" is "critical"), it is here submitted that such mechanics are well known in the art. This is well evidenced by a key word search in USPTO patents database since 1976 which will produce over 450 different patents referring to this technique. Such a wide-spread use of the term just in these patents is more than sufficient to show that the technique is well known in the art so that no detailed disclosure is needed of the mechanics thereof in the present application.

Of course, just because a technique is known does not make its use in a reference using a different technique obvious. In the examiner's comments, this seems to be a source of confusion. However, the two issues are separate; and arguing that a technique is to not obvious in a reference using another technique is not the same as arguing that there is something "critical" about applicant's technique or mounting which must be specially taught.

Therefore, in view of all of the above, it is submitted that the rejection under § 112 should now be withdrawn.

In the *Claims Rejection – 35 USC § 103* sections, claims 65-81 (all claims present in the application) were rejected as being obvious over the previously cited Oh patent with the use of the French patent and for dependent claims 70, 76 and 78 additionally the Naoi patent.

The deficiencies of the Oh patent have been discussed previously, to the effect that the use of this patent as a primary reference for a rejection was previously dropped. While the examiner evidently continues to state that the cameras therein point in a same direction away from the display and toward the user, it is submitted that this is not correct (what frame of reference could this be true for?). In particular, the cameras can either point in a same (parallel) direction away from the display or in an oblique direction (to the display) toward the user, but not both. To even more clearly show this, the claims have been amended to include the term "parallel" when describing the directions of the cameras and hence to clearly avoid this reference.

The French patent may be prior art to the present application based on its parent applications. However, as a continuation-in-part application may have new matter therein,

in order to make a *prima facia* rejection, it is the examiner's burden to show that the portions of the continuation-in-part relied on were present in a parent application having an effective prior art date before the critical date of the application being examined. As this has not been done, the French patent is not properly a prior art reference.

However, even if the French patent (or the relevant portions thereof) is shown to be prior art, the French patent does not supply the missing elements. While the examiner has noted that the French patent shows optical sensors mounted on a display, it will be appreciated that such sensors are not TV cameras and do not create an image. While it is later indicated in the French patent that one or more TV cameras can also be used to view the space, there is no disclosure of the locations or directions of these cameras. And given that the Oh patent discloses two cameras already which are not directed parallel, there is no motivation in the French patent to mount the TV cameras of the Oh patent differently than that already disclosed in the Oh patent.

Therefore, for all of the foregoing reasons, it is submitted that there is no motivation to combine the Oh patent and the French patent patent, and even if there were, the combined hybrid would still not make the present invention as claimed obvious. It is therefore further submitted that independent claims 65, 80 and 81 are allowable over these cited references; and for these same reasons at least, all of the dependent claims 66-79 are also allowable.

For all of the foregoing reasons, it is submitted that the present application is in condition for allowance and such action is solicited.

ATTACHMENT B
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-64 (canceled).

65. (currently amended) A method for input by a person of data to a computer having a display comprising the steps of:

- providing at least two spaced TV cameras provided on said display, said at least two TV cameras being pointed in substantially a same parallel direction away from said display for acquiring at least a stereo pair of images of one or more datums associated with the person;
- photogrammetrically determining, from said stereo pair of images acquired by said TV cameras, the three dimensional position of at least one of said datums; and
- controlling said display based on said position of said datum or datums.

Col 1 cont

66. (previously presented) A method according to claim 65, wherein said cameras are located on opposite sides of said display.

67. (previously presented) A method according to claim 65, wherein at least one of said datums is a natural feature of the person or clothing worn by the person.

68. (previously presented) A method according to claim 65, wherein at least one of said datums is an artificial feature on the person or clothing worn by the person.

69. (previously presented) A method according to claim 65, wherein at least one of said datums is distinguishable in reflected light.

70. (previously presented) A method according to claim 65, wherein a light source proximate each TV camera is used to illuminate said datums.

71. (previously presented) A method according to claim 65, wherein said display provides 3D graphical data concerning a virtual object which is manipulated by the person.

72. (previously presented) A method according to claim 65, wherein datums on additional persons or portions thereof are sensed by said cameras, and information concerning position thereof is determined.

73. (previously presented) A method according to claim 65, wherein orientation of a portion of the person is also determined.

74. (previously presented) A method according to claim 73, wherein the determined position and orientation is used to determine the point on a display indicated by the person pointing at the display.

Col cont

75. (previously presented) A method according to claim 65, wherein at least one of said datums is retroreflective.

76. (previously presented) A method according to claim 65, wherein an IR LED light source is used to illuminate said datums.

77. (previously presented) A method according to claim 65, wherein at least one of said datums is distinctive in color or shape.

78. (previously presented) A method according to claim 65, wherein at least one of said datums is in the shape of a point or line.

79. (previously presented) A method according to claim 65, wherein at least one of said datums is associated with a finger of the person

80. (currently amended) A method for input by a person of data to a computer having a display comprising the steps of:

- providing at least two spaced TV cameras, said at least two TV cameras being pointed in substantially a same parallel direction for acquiring at least a stereo pair of images of datums associated with the person;
- determining, from said stereo pair of images acquired by said TV cameras, the three dimensional orientation of said datums; and
- controlling said display based on said orientation of said datums.

81. (currently amended) A method for input by a person of data to a computer having a display comprising the steps of:

- providing at least two spaced TV cameras, said at least two TV cameras being pointed in substantially a same parallel direction for acquiring at least a stereo pair of images of datums associated with the person, at least one of said datums being a natural feature associated with said person;
- photogrammetrically determining, from said stereo pair of images acquired by said TV cameras, the three dimensional orientation of at least said at least one datum; and
- controlling said display based on said orientation of said at least one datum.